

IN THE CLAIMS:

Please cancel claims 1 – 14 without prejudice or disclaimer as to the subject matter therein.

Please add the following new claims:

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15. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

02 configuring the first node with information regarding a first method of a first object;

wherein the first node is operable to invoke the first method of the first object during execution of the graphical data flow program.

16. (New) The memory medium of claim 15,
wherein said configuring the first node comprises:

determining a set of classes;

receiving first user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more methods;

receiving second user input selecting the first method from the one or more methods.

Sub B2
17. (New) The memory medium of claim 16, wherein the program instructions are further executable to implement:

constructing execution instructions in response to the graphical data flow program, wherein the execution instructions are operable to instantiate the first object from the first class and invoke the first method of the first object.

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18. (New) The memory medium of claim 17, wherein the program instructions are further executable to implement:

executing said execution instructions, wherein the first node invokes the first method of the first object during said executing.

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19. (New) The memory medium of claim 16, wherein the program instructions are further executable to implement:

displaying the set of classes on the display;

wherein the first user input comprises graphically selecting the first class from the set of classes.

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20. (New) The memory medium of claim 16, wherein the program instructions are further executable to implement:

displaying the one or more methods on the display;

wherein the second user input comprises graphically selecting the first method from the one or more methods.

21. (New) The memory medium of claim 16, wherein the program instructions are executable to implement:

providing type library information, wherein the type library information specifies a type library;

querying said type library to determine the set of classes.

22. (New) The memory medium of claim 16,

Sub B3
wherein said providing type library information comprises selecting a first type library from a plurality of type libraries in response to user input.

23. (New) The memory medium of claim 22, wherein the program instructions are further executable to implement:

displaying the plurality of type libraries on the display;

wherein said providing type library information comprises graphically selecting the first type library from the plurality of type libraries.

24. (New) The memory medium of claim 16,

wherein the graphical data flow program is created in a first graphical program development environment;

wherein the first class is created in a different program development environment.

Sub C1
25. (New) The memory medium of claim 24,

wherein the first class is created in a text-based program development environment.

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26. (New) The memory medium of claim 16,

wherein the graphical data flow program is created in a first graphical program development environment;

wherein the first class is not present in the first graphical program development environment.

27. (New) The memory medium of claim 16, wherein the program instructions are further executable to implement:

receiving third user input selecting the first node for configuration;

wherein the first and second user input are provided in response to the third user input;

wherein the first and second user input are operable to configure the first node to invoke the first method of the first object.

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28. (New) The memory medium of claim 27, wherein the program instructions are further executable to implement:

displaying the set of classes on the display in response to the third user input.

29. (New) The memory medium of claim 15,
wherein the first node is designed to invoke methods of one or more of a plurality of different objects.

30. (New) The memory medium of claim 15,
wherein the graphical data flow program performs a measurement function.

31. (New) The memory medium of claim 15,
wherein the graphical data flow program operates as a virtual instrument.

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32. (New) The memory medium of claim 15,
wherein interconnections between nodes in the graphical data flow program indicate that data produced by one node is used by another node.

33. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the display a first node in the graphical data flow program in response to user input;

configuring the first node with information regarding a first method, wherein said configuring comprises:

receiving first user input selecting a first class from a set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more methods;

receiving second user input selecting a first method from the one or more methods; and

wherein during execution of the graphical data flow program the first node is operable to invoke the first method of the first object.

34. (New) The memory medium of claim 33, wherein the program instructions are further executable to implement:

constructing execution instructions in response to the graphical data flow program, wherein the execution instructions are operable to instantiate the first object from the first class and invoke the first method of the first object.

35. (New) The memory medium of claim 33, wherein the program instructions are further executable to implement:

displaying the set of classes on the display;

wherein the first user input comprises graphically selecting the first class from the set of classes;

displaying the one or more methods on the display;

wherein the second user input comprises graphically selecting the first method from the one or more methods.

36. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate

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functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

determining a set of classes;

receiving user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more methods;

receiving user input selecting a first method from the one or more methods; and

wherein the first node is operable to invoke the first method of the first object during execution of the graphical data flow program.

37. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the display a first node in the graphical data flow program in response to user input;

providing type library information, wherein the type library information specifies a type library;

querying said type library to determine a set of classes;

receiving first user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more methods;

receiving second user input selecting a first method from the one or more methods; and

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wherein during execution of the graphical data flow program the first node is operable to invoke the first method of the first object.

38. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on the screen a first node in the graphical data flow program in response to user input;

determining a set of classes;

receiving user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more methods;

receiving user input selecting a first method from the one or more methods; and

wherein the first node is operable to invoke the first method of the first object during execution of the graphical data flow program.

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39. (New) A method for creating a graphical data flow program, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

configuring the first node with information regarding a first method of a first object;

wherein the first node is operable to invoke the first method of the first object during execution of the graphical data flow program.

40. (New) A method for creating a graphical data flow program, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

determining a set of classes;

receiving user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more methods;

receiving user input selecting a first method from the one or more methods; and

wherein the first node is operable to invoke the first method of the first object.

41. (New) A method for creating a graphical data flow program, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

displaying the graphical data flow program on the display, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program;

displaying on the display a first node in the graphical data flow program in response to user input;

configuring the first node with information regarding a first method, wherein said configuring comprises:

receiving first user input selecting a first class from a set of classes,
wherein a first object is operable to be instantiated from the first class, wherein the first
class includes one or more methods;

receiving second user input selecting a first method from the one or more
methods; and

wherein during execution of the graphical data flow program the first node is
operable to invoke the first method of the first object.

42. (New) A memory medium comprising program instructions for creating a
graphical data flow program, wherein the program instructions operate in a computer
including a display and a user input device, wherein the program instructions are
executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data
flow program comprises a plurality of interconnected nodes which visually indicate
functionality of the graphical data flow program, wherein the plurality of interconnected
nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in
response to user input;

configuring the first node with information regarding a first property of a first
object;

wherein the first node is operable to get or set the first property of the first object
during execution of the graphical data flow program.

43. (New) The memory medium of claim 42,
wherein said configuring the first node comprises:
determining a set of classes;

~~receiving first user input selecting a first class from the set of classes,
wherein a first object is operable to be instantiated from the first class, wherein the first
class includes one or more properties;~~

~~receiving second user input selecting the first property from the one or
more properties.~~

Sub B6 44. (New) The memory medium of claim 43, wherein the program instructions
are further executable to implement:

~~constructing execution instructions in response to the graphical data flow
program, wherein the execution instructions are operable to instantiate the first object
from the first class and get or set the first property of the first object.~~

Sub A2 45. (New) The memory medium of claim 44, wherein the program instructions
are further executable to implement:

~~executing said execution instructions, wherein the first node gets or sets the first
property of the first object during said executing.~~

46. (New) The memory medium of claim 43, wherein the program instructions
are further executable to implement:

displaying the set of classes on the display;

wherein the first user input comprises graphically selecting the first class from the
set of classes.

47. (New) The memory medium of claim 43, wherein the program instructions
are further executable to implement:

displaying the one or more properties on the display;

wherein the second user input comprises graphically selecting the first property
from the one or more properties.

48. (New) The memory medium of claim 43, wherein the program instructions
are executable to implement:

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providing type library information, wherein the type library information specifies a type library;

querying said type library to determine the set of classes.

49. (New) The memory medium of claim 43,
wherein said providing type library information comprises selecting a first type library from a plurality of type libraries in response to user input.

Sub B7
50. (New) The memory medium of claim 49, wherein the program instructions are further executable to implement:

displaying the plurality of type libraries on the display;

wherein said providing type library information comprises graphically selecting the first type library from the plurality of type libraries.

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51. (New) The memory medium of claim 43,
wherein the graphical data flow program is created in a first graphical program development environment;

wherein the first class is created in a different program development environment.

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52. (New) The memory medium of claim 51,
wherein the first class is created in a text-based program development environment.

Sub B7
53. (New) The memory medium of claim 43,
wherein the graphical data flow program is created in a first graphical program development environment;

wherein the first class is not present in the first graphical program development environment.

54. (New) The memory medium of claim 43, wherein the program instructions are further executable to implement:

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receiving third user input selecting the first node for configuration;
wherein the first and second user input are provided in response to the third user input;

wherein the first and second user input are operable to configure the first node to get or set the first property of the first object.

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55. (New) The memory medium of claim 54, wherein the program instructions are further executable to implement:

displaying the set of classes on the display in response to the third user input.

56. (New) The memory medium of claim 42,

wherein the first node is designed to get or set properties of one or more of a plurality of different objects.

57. (New) The memory medium of claim 42,

wherein the graphical data flow program performs a measurement function.

58. (New) The memory medium of claim 42,

wherein the graphical data flow program operates as a virtual instrument.

59. (New) The memory medium of claim 42,

wherein interconnections between nodes in the graphical data flow program indicate that data produced by one node is used by another node.

60. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate

functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the display a first node in the graphical data flow program in response to user input;

configuring the first node with information regarding a first property, wherein said configuring comprises:

receiving first user input selecting a first class from a set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more properties;

receiving second user input selecting a first property from the one or more properties; and

wherein during execution of the graphical data flow program the first node is operable to perform at least one of getting or setting the first property of the first object.

61. (New) The memory medium of claim 60, wherein the program instructions are further executable to implement:

constructing execution instructions in response to the graphical data flow program, wherein the execution instructions are operable to instantiate the first object from the first class and get or set the first property of the first object.

62. (New) The memory medium of claim 60, wherein the program instructions are further executable to implement:

displaying the set of classes on the display;

wherein the first user input comprises graphically selecting the first class from the set of classes;

displaying the one or more properties on the display;

wherein the second user input comprises graphically selecting the first property from the one or more properties.

63. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer

including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

determining a set of classes;

receiving user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more properties;

receiving user input selecting a first property from the one or more properties; and

wherein the first node is operable to get or set the first property of the first object during execution of the graphical data flow program.

64. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the display a first node in the graphical data flow program in response to user input;

providing type library information, wherein the type library information specifies a type library;

querying said type library to determine a set of classes;

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receiving first user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more properties;

receiving second user input selecting a first property from the one or more properties; and

wherein during execution of the graphical data flow program the first node is operable to get or set the first property of the first object.

65. (New) A memory medium comprising program instructions for creating a graphical data flow program, wherein the program instructions operate in a computer including a display and a user input device, wherein the program instructions are executable to implement:

displaying on the screen a first node in the graphical data flow program in response to user input;

determining a set of classes;

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receiving user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more properties;

receiving user input selecting a first property from the one or more properties; and

wherein the first node is operable to get or set the first property of the first object during execution of the graphical data flow program.

66. (New) A method for creating a graphical data flow program, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

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displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

configuring the first node with information regarding a first property of a first object;

wherein the first node is operable to get or set the first property of the first object during execution of the graphical data flow program.

67. (New) A method for creating a graphical data flow program, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

displaying on a display a graphical data flow program, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program, wherein the plurality of interconnected nodes are connected by lines which represent flow of data among the nodes;

displaying on the screen a first node in the graphical data flow program in response to user input;

determining a set of classes;

receiving user input selecting a first class from the set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more properties;

receiving user input selecting a first property from the one or more properties; and wherein the first node is operable to get or set the first property of the first object.

68. (New) A method for creating a graphical data flow program, wherein the method for creating the graphical data flow program operates in a computer including a display and a user input device, the method for creating the graphical data flow program comprising:

displaying the graphical data flow program on the display, wherein the graphical data flow program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical data flow program;

displaying on the display a first node in the graphical data flow program in response to user input;

configuring the first node with information regarding a first property, wherein said configuring comprises:

a2 receiving first user input selecting a first class from a set of classes, wherein a first object is operable to be instantiated from the first class, wherein the first class includes one or more properties;

receiving second user input selecting a first property from the one or more properties; and

wherein during execution of the graphical data flow program the first node is operable to get or set the first property of the first object.
